

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

- 1 1. (Currently Amended) A method of directing a computer network for booting
2 using an embedded operating system (OS) based computer, the method comprising:
3 listening with an embedded OS based computer to PXE requests from a plurality
4 of PXE enabled target servers of a computer network; and
5 providing from the embedded OS based computer to one of the plurality of PXE
6 enabled target servers a netboot program and address information of a boot server ~~from~~
7 ~~the embedded OS based computer~~ responsive to a PXE request from the one of the PXE
8 enabled target servers.

- 1 2. (Original) The method as in claim 1, wherein the computer network comprises a
2 plurality of subnetworks of PXE enabled target servers.

- 1 3. (Previously Presented) The method as in claim 2, wherein the embedded OS
2 based computer listens to one of the subnetworks.

- 1 4. (Previously Presented) The method as in claim 3, wherein the embedded OS
2 based computer listens to one of the subnetworks by wireless communication.

- 1 5. (Original) The method as in claim 1, wherein the embedded OS is Windows CE
2 operating system.

- 1 6. (Original) The method as in claim 1, wherein the plurality of PXE enabled target
2 servers are part of a subnetwork of the computer network.

- 1 7. (Original) The method as in claim 1, wherein the listening step is performed
2 through a TCP/IP stack.

1 8. (Original) The method as in claim 1, wherein the address information of the boot
2 server comprises an IP address;

1 9. (Previously Presented) The method as in claim 1, further comprising transferring
2 a boot image from the boot server responsive to the netboot program executing on the one of the
3 PXE enabled target servers.

1 10. (Original) The method as in claim 9, wherein the boot image is provided through
2 a router.

1 11. (Original) The method as in claim 9, wherein the boot image is provided by
2 wireless communication.

1 12. (Original) The method as in claim 9, wherein the boot image comprises responses
2 to preboot execution environment queries.

1 13. (Original) The method as in claim 9, wherein the boot image further comprises a
2 script specific to the requesting target server.

1 14. (Original) The method as in claim 9, wherein the boot image comprises code to
2 install at least one operating system.

1 15. (Original) The method as in claim 9, wherein the boot image comprises
2 application software.

1 16. (Original) The method as in claim 9, wherein the netboot program is executed out
2 of a read-only memory.

1 17. (Original) The method as in claim 9, wherein the boot image is transferred using
2 a trivial file transfer protocol.

1 18. (Previously Presented) The method as in claim 9, wherein the one of the PXE
2 enabled target servers is booted by executing the boot image.

1 19. (Previously Presented) The method as in claim 1, further comprising displaying
2 address information for the plurality of PXE enabled target servers.

1 20. (Previously Presented) The method as in claim 1, further comprising displaying a
2 plurality of boot images for the plurality of PXE enabled target servers.

1 21. (Previously Presented) The method as in claim 1, further comprising displaying
2 PXE requests for the plurality of PXE enabled target servers.

1 22. (Previously Presented) An embedded OS based computer for network booting
2 under preboot execution environment (PXE) control, the computer comprising:

3 a network interface controller (NIC);

4 an embedded operating system (OS) to control the NIC;

5 a processor coupled to the NIC;

6 a processor executable PXE routing software, which is adapted to perform the
7 processor executable steps of:

8 listening to PXE requests from a plurality of PXE enabled target servers of
9 a computer network; and

10 providing to one of the plurality of PXE enabled target servers a netboot
11 program and address information of a boot server separate from the embedded OS
12 based computer, in response to a PXE request from the one of the PXE enabled
13 target servers.

1 23. (Original) The embedded OS based computer as in claim 22, further comprising a
2 display coupled to the processor.

1 24. (Original) The embedded OS based computer as in claim 22, further comprising
2 an input device coupled to the processor.

1 25. (Original) The embedded OS based computer as in claim 22, further comprising a
2 memory coupled to the processor.

1 26. (Currently Amended) The embedded OS based computer as in claim 25, wherein
2 the memory further comprises:

3 a web browser;

4 PXE service applications;

5 a TFTP application;

6 ~~a Net Boot Program (NBP)~~ the netboot program; and

7 a boot image.

1 27. (Currently Amended) The embedded OS based computer as in claim [[25]] 26,
2 wherein the embedded OS based computer is configured through the web browser.

1 28. (Original) The embedded OS based computer as in claim 25, wherein the
2 embedded OS based computer is configured directly.

1 29. – 38. (Cancelled)

1 39. (Previously Presented) The method of claim 1, wherein providing the netboot
2 program from the embedded OS based computer comprises providing the netboot program from
3 the embedded OS based computer that is separate from the boot server.

1 40. (Previously Presented) The method of claim 39, wherein providing the netboot
2 program to the one of the PXE enabled target servers comprises providing the netboot program
3 that when executed causes the one of the PXE enabled target servers to issue a request to the
4 boot server for a boot image to download to the one of the PXE enabled target servers.

1 41. (Previously Presented) The method of claim 40, further comprising:
2 receiving, by the embedded OS based computer, the request to the boot server;
3 and
4 in response to the request, send, by the embedded OS based computer, a Trivial
5 File Transfer Protocol (TFTP) request to the boot server for the boot image.

1 42. (Previously Presented) The embedded OS based computer of claim 22, wherein
2 the netboot program when executed causes the one of the PXE enabled target servers to issue a
3 request to the boot server for a boot image.

1 43. (Previously Presented) The embedded OS based computer of claim 42, wherein
2 the boot image comprises a script that includes code to install an operating system on the one of
3 the PXE enabled target servers.

1 44. (Previously Presented) The embedded OS based computer of claim 22,
2 comprising a handheld computer.

1 45. (Previously Presented) The embedded OS based computer of claim 22, wherein
2 the embedded OS comprises a Windows CE OS.

1 46. (Previously Presented) The embedded OS based computer of claim 22, further
2 comprising a display to display address information for the plurality of PXE enabled target
3 servers.

1 47. (Previously Presented) An article comprising a storage containing software that
2 when executed causes a first computer to:

3 receive a request from a target server for remote booting of the target server; and
4 in response to the request, send a program and address information of a boot
5 server to the target server, wherein the boot server is separate from the first computer,
6 wherein the program when executed causes the target server to issue a boot server
7 request to the boot server for a boot image to download to the target server.

1 48. (Previously Presented) The article of claim 47, wherein the software when
2 executed causes the first computer to further:

3 receive the boot server request; and
4 in response to the boot server request, issue a Trivial File Transfer Protocol
5 (TFTP) request to the boot server for the boot image.

1 49. (Previously Presented) The article of claim 47, wherein the first computer
2 comprises an embedded operating system (OS) based computer containing an embedded OS.

1 50. (Previously Presented) The article of claim 49, wherein the first computer
2 comprises a handheld computer.

1 51. (Previously Presented) The article of claim 47, wherein the first computer
2 receives the request from the target server by wireless communications.

1 52. (Previously Presented) The article of claim 47, wherein the received request from
2 the target server comprises a preboot execution environment (PXE) request, the target server
3 being a PXE enabled target server.

1 53. (Previously Presented) A computer comprising:
2 a processor;
3 an embedded operating system (OS) executable on the processor;
4 software executable on the processor to:
5 receive a request from a target server; and
6 in response to the request, send information to the target server to direct
7 the target server to a boot server separate from the computer for downloading a
8 boot image from the boot server to the target server for remote booting of the
9 target server,
10 wherein the computer is a reduced-capability computer having less
11 capability than a server computer.

1 54. (Previously Presented) The computer of claim 53, wherein the embedded OS
2 comprises a Windows CE OS.

1 55. (Previously Presented) The computer of claim 53, further comprising a wireless
2 interface to receive the request wirelessly.

1 56. (Previously Presented) The computer of claim 53, wherein the received request
2 comprises a preboot execution environment (PXE) request.

1 57. (Previously Presented) The computer of claim 53, further comprising a display to
2 display address information for plural target servers, and to list boot images for the plural target
3 servers,
4 the software executable on the processor to:
5 listen to requests from the plural target servers for remote booting of the
6 target servers.

- 1 58. (Previously Presented) The computer of claim 53, wherein the information sent
2 to the target server comprises a netboot program and an address of the boot server.